**Section 611.358 Monitoring for Lead and Copper in Source Water**

a) Sampling Location, Collection Methods, and Number of Samples

1) A supplier failing to meet the lead or copper action level on the basis of tap samples under Section 611.356 must collect lead and copper source water samples under specific requirements for sample location, number of samples, and collection methods:

A) A groundwater supplier must take a minimum of one sample at every entry point to the distribution system after the supplier applies any treatment or in the distribution system at a point representing each source after treatment (a "sampling point"). The supplier must take one sample at the same sampling point unless conditions make another sampling point more closely represent a source or treatment plant.

B) A surface water supplier must take a minimum of one sample at every entry point to the distribution system after treatment or in the distribution system at a sampling point. The supplier must take each sample at the same sampling point unless conditions make another sampling point more closely represent a source or treatment plant.

BOARD NOTE: For this subsection (a)(1)(B), a system using a combination of surface water and groundwater sources is a surface water system.

C) If a supplier draws water from more than one source and combines the sources before distribution, the supplier must sample at an entry point to the distribution system during periods of normal operating conditions (i.e., when water represents all sources being used).

D) The Agency may issue a SEP reducing the total number of samples a supplier must analyze by allowing the use of compositing. Certified laboratory personnel must composite the samples. A composite sample may include a maximum of five samples. However, if the lead concentration in the composite sample is greater than or equal to 0.001 mg/L or the copper concentration is greater than or equal to 0.160 mg/L, the supplier must do either of two things:

i) The supplier must take and analyze a follow-up sample within 14 days at each sampling point included in the composite sample; or

ii) If duplicate samples or sufficient volumes of the original samples are available from each sampling point the certified laboratory used in the composite sample, the supplier may use those instead of resampling.

2) SEP Requiring an Additional Sample

A) Upon determining that sampling indicates exceedance of the lead or copper MPC under Section 611.353(b)(4), the Agency must issue a SEP requiring the supplier to collect one additional sample as soon as possible after the initial sample at the same sampling point but before two weeks after the supplier took the initial sample.

B) If a supplier takes an Agency-required confirmation sample for lead or copper, the supplier must average the results obtained from the initial sample with those from the confirmation sample to determine whether it complies with the Agency-specified lead and copper MPCs.

i) For averaging, consider any analytical result below the MDL as zero.

ii) Consider any value above the MDL but below the PQL either as the measured value or one-half the PQL.

b) Monitoring Frequency after System Exceeds Tap Water Action Level. A supplier exceeding the lead or copper action level in tap for the first time or for the first time after adding a new source or installing source water treatment under Section 611.353(b)(2) must collect one source water sample from each entry point to its distribution system no later than six months after the end of the tap sampling period during which the supplier exceeds the lead or copper action level. For annual or less frequent tap monitoring cycles, the end of the tap sampling period is September 30 of the calendar year during which the sampling occurs or the last day of any alternative tap sampling period the Agency establishes in a SEP. If the Agency determines under Section 611.353(b)(2) that source water treatment is not necessary, the Agency may issue a SEP waiving source water monitoring for the supplier subsequently exceeding the lead or copper action level at the tap under subsections (b)(1)(A) through (b)(1)(C).

1) The Agency may issue a SEP waiving source water monitoring for the supplier exceeding the lead or copper action level at the tap under specific conditions:

A) The supplier already conducted source water monitoring after previously exceeding the lead or copper action level;

B) The Agency issued a SEP determining that source water treatment is not necessary; and

C) The supplier has not added any new water sources.

2) This subsection (b)(2) corresponds with 40 CFR 141.88(b)(2), which USEPA marked "[reserved]". This statement maintains structural consistency with USEPA's rule.

c) Monitoring Frequency after Installing Source Water Treatment or Adding a New Source

1) A supplier installing source water treatment under Section 611.353(a)(3) must collect one source water sample from each entry point to its distribution system during each of two consecutive six-month source water monitoring periods on or before 36 months after completing step 2, as Section 611.353(a)(4) specifies.

2) A supplier adding a new source must collect one source water sample from each entry point to its distribution system during each six-month source water monitoring period until the supplier demonstrates that the supplier has maintained finished drinking water entering the distribution system below the MPCs for lead and copper the Agency specifies under Section 611.353(b)(4), or the Agency issues a SEP determining that the supplier does not need source water treatment.

d) Monitoring Frequency after the Agency Specifies the Lead and Copper MPCs

1) A supplier must monitor at the frequency subsections (d)(1) and (d)(2) specify if the Agency specifies the MPCs under Section 611.353(b)(4).

A) GWS Suppliers

i) A GWS supplier sampling under subsection (d)(1) must collect samples once during the three-year compliance period (as Section 611.101 defines the term) during which the Agency makes its determination under Section 611.353(b)(4).

ii) A GWS supplier sampling under subsection (d)(1) must sample once during each subsequent compliance period.

iii) A supplier must triennially collect samples every third calendar year.

B) A SWS or mixed system supplier must collect samples once during each calendar year, the first annual source water monitoring period to begin during the year in which the Agency makes its determination under Section 611.353(b)(4).

2) A supplier needs not sample source water for lead or copper if the supplier meets the action level for the specific contaminant in all tap water samples during the entire source water monitoring period under subsection (d)(1)(A) or (d)(1)(B).

e) Reduced Monitoring Frequency

1) A GWS supplier may reduce its source water monitoring frequency for lead and copper to once during each nine-year compliance cycle (as Section 611.101 defines the term), provided the supplier collects the samples no later than every ninth calendar year, and only if the supplier meets certain criteria:

A) The supplier demonstrates that finished drinking water entering the distribution system remains below the MPCs for lead and copper the Agency specifies under Section 611.353(b)(4) during at least three consecutive monitoring periods under subsection (d)(1).

B) This subsection (e)(1)(B) corresponds with 40 CFR 141.88(e)(1)(ii), which USEPA marked "[reserved]". This statement maintains structural consistency with USEPA's rule.

2) A SWS or mixed system supplier may reduce its monitoring frequency subsection (d)(1) requires to once during each nine-year compliance cycle (as Section 611.101 defines the term) if the supplier collects the samples no later than every ninth calendar year, and only if the supplier meets certain criteria:

A) The supplier demonstrates that finished drinking water entering its distribution system remains below the MPCs for lead and copper the Agency specifies under Section 611.353(b)(4) for at least three consecutive years.

B) This subsection (e)(1)(B) corresponds with 40 CFR 141.88(e)(1)(ii), which USEPA marked "[reserved]". This statement maintains structural consistency with USEPA's rule.

3) A supplier using a new source of water must not reduce its monitoring for lead or copper until after the supplier demonstrates, by samples it collected from the new source during three consecutive source water monitoring periods under subsection (d)(1), that lead or copper levels are below the MPC the Agency specifies under Section 611.353(a)(5).

BOARD NOTE: This Section derives from 40 CFR 141.88.

(Source: Amended at 47 Ill. Reg. 16486, effective November 2, 2023)